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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,143	09/30/2003	Young-Woo Lee	1293.1829	3823
21171	7590	07/24/2009		
STAAS & HALSEY LLP			EXAMINER	
SUITE 700			AGUSTIN, PETER VINCENT	
1201 NEW YORK AVENUE, N.W.				
WASHINGTON, DC 20005			ART UNIT	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/673,143

**Applicant(s)**

LEE ET AL.

**Examiner**

Peter Vincent Agustin

**Art Unit**

2627

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 and 22-44 is/are pending in the application.
- 4a) Of the above claim(s) 9-14, 22-26 and 34-38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 15-18, 27-33 and 39-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Claims 1-18 & 22-44 are currently pending, with claims 9-14, 22-26 & 34-38 withdrawn from consideration, and claims 1-8, 15-18, 27-33 & 39-44 being examined.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-8, 15-18, 27-33 & 39-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogihara (US 2002/0075780).

In regard to claims 1 & 6-8, Ogihara discloses a recording medium type discriminating apparatus (Figure 1), comprising: a radio frequency (RF) amplifier (109) to output a signal ( $S_{PP}$ ) based on light reflected from a recording medium (101); a wobble amplitude detector (118) to detect an amplitude (LV2 in Figure 3) of a wobble formed on the recording medium based on an output signal of the RF amplifier (as shown in Figure 3) to discriminate a recording medium type of the recording medium (title: "identifying optical disks"); and a system controller (105) to discriminate the recording medium type of the recording medium (101) by comparing the wobble amplitude (LV2) with a pre-set wobble amplitude reference value (paragraph 0036: "predetermined level").

In regard to claim 2, Ogihara discloses that the RF amplifier (109) detects a push-pull signal ( $S_{PP}$ ) by determining an amount of the reflected light and provides the detected push-pull signal to the wobble amplitude detector (118).

In regard to claims 3 & 4, Ogihara discloses that the wobble amplitude detector detects a peak-to-peak value of the output signal of the RF amplifier and identifies the detected peak-to-peak value as the wobble amplitude (see paragraph 0037: “mVp-p”).

In regard to claim 5, Ogihara discloses that the system controller (105) determines that the recording medium is a DVD(+) type recording medium when the wobble amplitude is higher than the reference value and that the recording medium is a DVD(-) type recording medium when the wobble amplitude is not higher than the reference value (note the description of LV2, as compared to the predetermined level, in paragraph 0036).

However, Ogihara does not disclose: in regard to claims 1 & 6-8, detecting only one amplitude of the wobble; in regard to claim 6, that the reference value is about 16 nm; in regard to claim 7, that the reference value is less than 18 nm; and in regard to claim 8, that the reference value is greater than 14 nm.

(A) Regarding the detection of “only one” amplitude of the wobble (claims 1 & 6-8):

In Ogihara, detection levels LV1 and LV2 are compared with each other (see Figure 3). The following conditions are then tested to discriminate between DVD-RW, DVD+RW, and DVD-ROM disks:

- (a) When  $LV1 > LV2$  and LV1 is at a “predetermined level” or higher, the optical disk is identified as a DVD-RW disk (see paragraph 0037).
- (b) When  $LV2 > LV1$  and LV2 is at a “predetermined level” or higher, the optical disk is identified as a DVD+RW disk (see paragraph 0038).
- (c) When both LV1 and LV2 are smaller than predetermined levels, the optical disk is identified as a DVD-ROM disk (see paragraph 0039).

Therefore, Ogihara's invention has the advantage of discriminating between these three types of DVD disks.

However, it is also possible, based on the teachings of Ogihara, to implement a device which discriminates only between, e.g., a DVD+RW disk and a DVD-ROM disk. Such device would require only comparing LV2 with a predetermined level. That is, if identification of a DVD-RW disk is not desired, it would have been obvious to one of ordinary skill in the art at the time of invention to have omitted the step/function of comparing LV1 and LV2 from the teachings of Ogihara. This would be applicable in an environment/scenario where only the "DVD+" standard is used, and there is a desire to discriminate between DVD+RW disks and DVD-ROM disks. See MPEP § 2144.04, section II-A: "omission of an element and its function is obvious if the function of the element is not desired". See also *In re Larson*, 340 F.2d 965, 144 USPQ 347 (CCPA 1965) (Omission of additional framework and axle which served to increase the cargo carrying capacity of prior art mobile fluid carrying unit would have been obvious if this feature was not desired.); and *In re Kuhle*, 526 F.2d 553, 188 USPQ 7 (CCPA 1975) (deleting a prior art switch member and thereby eliminating its function was an obvious expedient).

Likewise, it is also possible, based on the teachings of Ogihara, to implement a device which discriminates only between, e.g., a DVD-RW disk and a DVD-ROM disk. Such device would require only comparing LV1 with a predetermined level. That is, if identification of a DVD+RW disk is not desired, it would have been obvious to one of ordinary skill in the art at the time of invention to have omitted the step/function of comparing LV1 and LV2 from the teachings of Ogihara. This would be applicable in an environment/scenario where only the

“DVD-” standard is used, and there is a desire to discriminate between DVD-RW disks and DVD-ROM disks.

Both modifications of Ogihara noted above involve detecting only one amplitude of the wobble, as claimed.

(B) Regarding the claimed values/ranges of the “reference value” (claims 6-8):

As noted above, Ogihara discloses the general conditions of claims 6-8. Therefore, selecting a reference value of “about 16 nm”, “less than 18 nm”, or “greater than 14 nm” would have been, to a person of ordinary skill in the art, an obvious matter of optimization of values/ranges discoverable through routine experimentation, and such optimization is not considered inventive, absent any evidence indicating that such values/ranges are critical. See MPEP § 2144.05, *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955), *Peterson*, 315 F.3d at 1330, 65 USPQ2d at 1382; *In re Hoeschele*, 406 F.2d 1403, 160 USPQ 809 (CCPA 1969). For more recent cases applying this principle, see *Merck & Co. Inc. v. Biocraft Laboratories Inc.*, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), cert. denied, 493 U.S. 975 (1989); *In re Kulling*, 897 F.2d 1147, 14 USPQ2d 1056 (Fed. Cir. 1990); and *In re Geisler*, 116 F.3d 1465, 43 USPQ2d 1362 (Fed. Cir. 1997).

Claims 15-18, 27-33 & 39-44 have similar limitations as claims 1-8 and are rejected on the same grounds.

***Response to Arguments***

4. Applicant's arguments filed on April 28, 2009 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Vincent Agustin whose telephone number is (571) 272-7567. The examiner can normally be reached on Monday-Thursday 8:30 AM-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on (571) 272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Peter Vincent Agustin/  
Primary Examiner, Art Unit 2627